Structure of TV Broadcasting Industry in Japan and in New Zealand

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Abstract

Japan's broadcasting structure and laws were crafted in an era when the financial investment in infrastructure and the scarcity of available spectrum made the licensing of a handful of broadcasters reasonable from both a legal and economic perspective. The structure of Japan's TV broadcasting industry presents a significant obstacle to the development and growth of the video content marketplace. Production and Transmission channels are vertically integrated in Japan, making it difficult for independent content aggregators to gain a foothold in Japan. In order to leverage the broadcasting industry in Japan, the policymakers need to restructure its regulatory framework.

Keywords: vertical integration, vertical separation, Maori TV, Kordia

Recent technological advances are eliminating long-standing borders between various industries. In the Japanese broadcasting and telecommunications sectors, for example, the traditional separations may be poised to give way to a growing degree of convergence. In recent years, the broadcasting sector has utilized telecom technologies to advance; meanwhile, the telecom sector has played only a subordinate role in program distribution. Recent developments in information and communication technology have enabled the emergence of a new system of broadcasting. With broadband technologies now capable of transmitting TV programs, telecom firms can be expected to supplement or even take over some traditional broadcasting functions. Seen from this perspective, broadcasting and telecommunications provide an alternative means of distribution.

Japanese broadcasting has been characterized by an extraordinary number of stations: the total includes five key stations, 109 subsidiary local stations and thirteen independent local stations. Each station, whether key, subsidiary local stations or independent, is involved in both program production and program transmission. Given the heavy duplication of upstream and downstream structures, vertical integration would seem to offer certain positive economies to broadcast stations. The industry's current structure, by contrast, helps to internalize these econo-

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Table 1 Year of the commencement of digital broadcasting service

Year	Country
1998	UK, USA
1999	Sweden
2000	Spain
2001	Australia, Finland, Korea
2002	Germany
2003	Netherlands, Italy, Belgie, Switzerland, Canada, India, Japan
2004	Taiwan, Mexico
2005	France, Czecho
2006	Austria, Greece, Lithuania, Estonia, Saudiarabia
2007	China, Slovenia, Norway, Morocco, Brazil
2008	New Zealand (April), Hungary (December)
2009	Poland (January), Portugal (April), Ireland (September)
2010	Russia

Table 2 Simultaneous Period of Anarogue and Digital TV Broadcasting

Country	Commencement of digital service	Termination of analogue service	Simultaneous period
Mexico	2004. 7. 5	2022. 1. 1	18 years
UK	1998. 11. 15	2012	14 years
Australia	2001. 1. 1	2013. 12. 31	12 years
USA	1998. 10. 29	2009. 6. 12	11 years
Korea	2001. 10	2012. 12. 31	11 years
Spain	2000. 5	2010. 4. 3	10 years
Brazil	2007. 12. 3	2016. 6. 29	9 years
Japan	2003. 12. 1	2011. 7. 24	8 years
Sweden	1999. 4. 1	2007. 10. 15	8 yeras
China	2007	2015	8 years
Romania	2005. 12. 1	2012. 12. 31	7 years
Germany	2002. 11	2008	6 years
Italy	2004. 1. 1	2010. 1. 1	6 years
Finland	2001. 8. 27	2007. 9. 1	6 years
France	2005. 3. 31	2011. 11. 30	6 years
South Africa	2006. 3	2011. 11. 1	5 years
Czecho	2005. 10	2010. 10. 10	5 years
Hong Kong	2007. 12. 31	2012	5 years
Taiwan	2006. 7	2010	4 years
New Zealand	2008. 4	2012	4 years
Netherlands	2003. 4	2006. 12. 11	3 years
Hungary	2008. 12. 1	2011. 12. 31	3 years
Poland	2009. 1. 1	2012. 12. 12	3 years
Portugal	2009. 4	2012	3 years
Norway	2007. 9. 31	2009. 12	2 years

Table 3 Businesses Engaged in Two Vertically Oriented Business Sectors

Field	Typically Non-Competitive Businesses	Latently Competitive Businesses
Railways	Infrastructure equipment for railroads and signals	Train operation
Electric Power	High-voltage transmission lines, laying of local power lines	Power generation
Gas	High-pressure gas transport, laying of local gas lines	Gas production
Air Transport	Airport services such as assigning of takeoff and landing slots	Aircraft operation
Broadcasting	Land-based wave transmission (propagation)	Program production and compilation

mies and thus deter entry from participants in other industries.

The Japanese broadcasting industry is experiencing a transition to digital terrestrial broadcasting. In December 2003, it began in three metropolitan areas of Japan: Tokyo, Nagoya and Osaka. In 2005, local key stations in regional core cities including Sendai, Mito, Yokohama, Shizuoka, Toyama, Kyoto and Kobe launched digital services. Analogue broadcasting is scheduled to terminate by July 2011. By that time, digital coverage is expected to be nationwide and digital receiver ownership will reach approximately 85 per cent. Insofar as broadcasting is regarded — reasonably or not — as a 'universal service', programming must be able to reach every individual.

In contrast to Japan, which is requiring a total of eight years from commencement of digital broadcasting (2003) to termination of analog broadcasting (2011), New Zealand will be able to accomplish this in only four years from 2008 to 2012. This is the result of leaving all aspects of digitization requiring extensive expertise and capital to Kordia* in its capacity as a specialist the field.

The broadcasting business is positioned as a network industry in the same manner as other public utilities (electricity, gas, water and railways). Although a common characteristic among network industries is that service can only be provided if a physical service infrastructure (network) is constructed in advance between the network industry operator (service seller) and service recipients (service buyer), the nature of that network differs considerably depending on the type of business.

In the case of viewing from the viewpoint of integration (vertical integration) and separation (vertical separation) of infrastructure equipment and services, even within the same transportation field, equipment and services are separated vertically in the railway, air transport and

* **Kordia** is a broadcast company with a Government shareholder which transmits TV programs of TVNZ, Media Works and Maori TV. Kordia provides national communication services for broadcast and telecommunications customers in New Zealand, as well as specialized network solutions. Kordia operates both the analogue and digital television platforms in New Zealand — digital terrestrial television (DTT) and direct-to-home (DTH-satellite). In 2007, Kordia upgraded the nationwide network of transmission towers to build the digital terrestrial television (DTT) platform, which now hosts Freeview (free-to-air digital television in New Zealand).

shipping fields, and multiple members of the private sector are engaged in production and consumption of services based on an infrastructure provided by the public sector. On the other hand, railways constitute a vertically-integrated enterprise in which operators themselves construct, retain and manage infrastructure equipment, and provided service on the basis thereof. In the field of broadcasting, in contrast to broadcasting stations in New Zealand which are separated vertically, those in Japan are integrated vertically.

In Japan, huge broadcasting stations have tremendous power both in terms of program production and transmission. The dominance of the broadcasting industry in Japan derives from its ownership of two key functions: transmission and content production (including packaging of content into distributable form). This vertically integrated structure gives the sector an exclusive and privileged status. Indeed, ownership of transmission facilities is sufficiently costly to deter market entry. Indeed, the scarcity of spectrum requires government allocation of broadcasting rights, further contributing to the privileged status of Japanese broadcast stations.

For example, NHK (Nippon Hoso Kyokai, or Japanese Broadcasting Corporation) is currently the world's largest fee-based broadcasting station, having an annual budget of 675 billion Yen. Amidst longstanding limitations on usable radio waves in the broadcast industry, service has been provided based on the premise of integration of program production and transmission functions. In general, although vertical integration has been considered to be desirable for businesses such as telecommunications, electric power and gas, in the case of the broadcasting industry of Japan, the form of vertical integration has been adopted due to circumstances left to the discretion of a special juridical corporation in the form of NHK along with considerations for ensuring freedom of broadcasting. NHK and handful of private broadcasters, who owned much of the available content, while interested in the new medium, have been reluctant to cannibalize their existing transmission channels by supporting the Internet.

On the other hand, broadcasting in New Zealand has been in the form of vertical integration ever since industry restructuring that occurred in 2003. Although implementation of digital broadcasting has lagged behind in New Zealand as compared with other advanced nations due to a financial crisis at the national level, as a result of severing the broadcasting division from TVNZ and assigning it to the control of Kordia, which is involved in the construction, operation and maintenance of digital broadcast networks, broadcasting operations have been deployed in the form of private broadcasting of TV3, TV4 and Maori TV.

In addition, as a result of granting all licenses to Freeview, a neutral broadcaster not engaged in programming, it has become easier to implement services by new entrants in the field such as banks and web operators, thereby making it possible to further promote digitization. In actuality, the industry restructuring implemented by the New Zealand government was correct. A new entry into the industry in the form of Maori TV was implemented, resulting in expanded transmission of programs broadcast in the Maori language. Differing from "communications," in the case of "broadcasting," where interruption of radio waves must be avoided at all costs, and since advanced operation and maintenance technologies are required for this purpose, this has resulted in the formation of a barrier that hinders entrance of new businesses.

Table 4 Vertical Integration and Vertical Separation

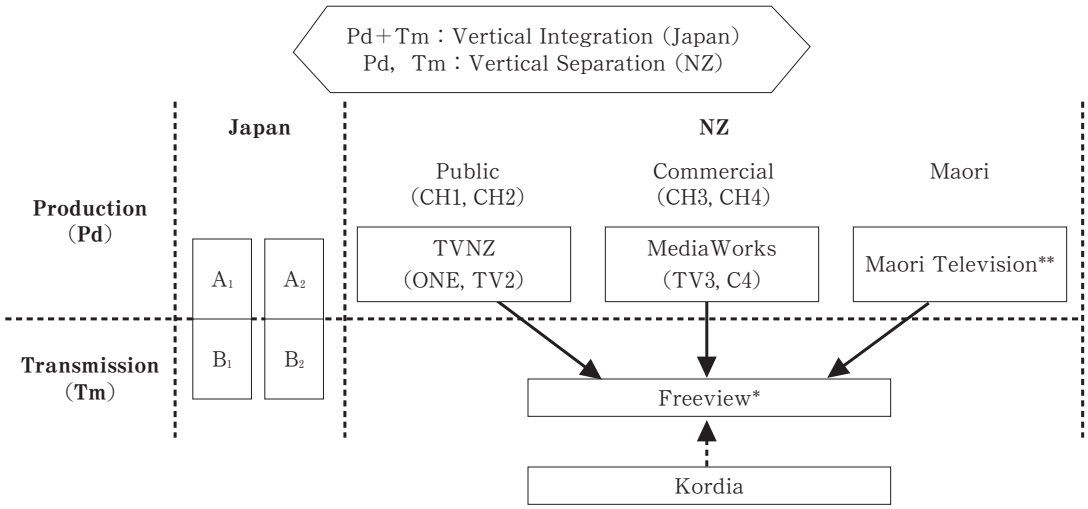
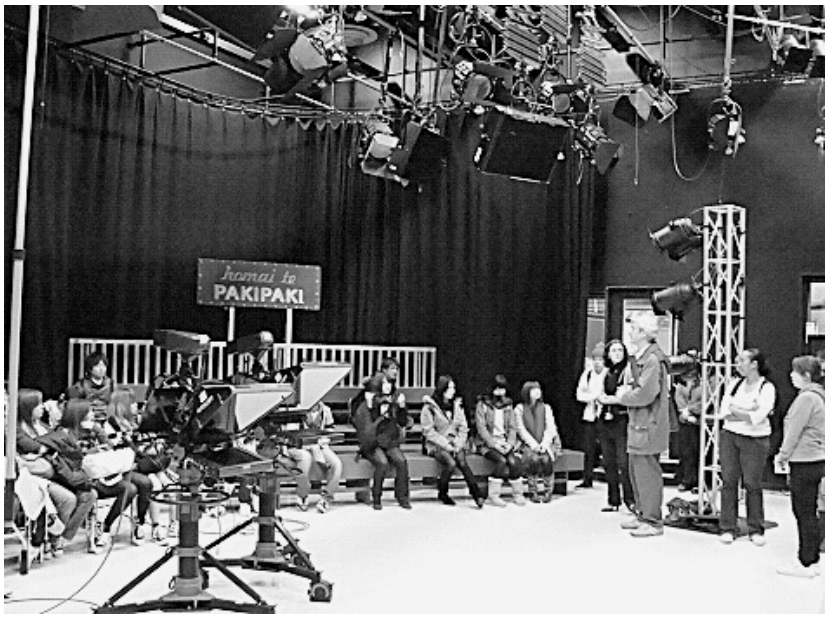


Photo 1 Maori TV Station**



* **Freeview** is a non-profit organization providing free-to air digital television to New Zealand. Freeview was established by New Zealand's leading broadcasters including TVNZ, Media Works (owners of TV3 and C4), Maori TV to bring a range of TV channels with no monthly subscription.

** **Maori TV** was established in 2004 to promote Maori language and culture. Maori TV is funded partly through direct government funding and partly through commercial advertising.

Photo 2 Maori TV Station

Photo 3 Maori TV Station

Photo 4　Maori TV Station

Photo 5　Maori TV Station

Asymmetric integration

At present, terrestrial broadcasting in Japan is characterized by a vertically integrated structure. By owning both program production and program transmission, broadcasting companies have exclusive control over the distribution of TV programs. In an integrated structure, owner-produced programs are distributed through self-owned transmission media; there is no incentive to televise programs from other broadcast stations or to use other transmission media. However, this exclusive, integrated structure clearly preserves certain economic inefficiencies, as the surplus of upstream (production) divisions is subject to the authority of the downstream (transmission) divisions.

The terrestrially broadcast stations seem to earn excess profits by controlling the entire process from content creation to final delivery to viewers. Under traditional airborne transmission, the scarcity of appropriate spectrum delivers privileges to the broadcast stations. Telecommunication carriers serve almost as subcontractors specializing in intermediate transmission.

The structure of Japan's TV broadcasting presents a significant obstacle to the development and growth of the content marketplace. One may surmise that this structure discourages competition and deters entry into broadcasting business. In an asymmetrically integrated structure, the telecommunication sector cannot take part in program distribution. Access to program distribution should be improved if the broadcasting industry is to move forward. If existing transmission divisions are faced with a threat from new participants, they will no longer enjoy the benefits associated with the previous market structure. Vertically separation between the two functions would thus be an efficient way to ensure fair competitive conditions. Once these functions are separated, entry into both the production and distribution markets will become much easier, with consequent benefits for the broadcasting business as a whole.

Conclusions

This study aimed to analyze the structure of TV broadcasting industry in Japan and in New Zealand. Production and Transmission channels are vertically integrated in Japan, making it difficult for new content providers such as Maori TV in New Zealand, independent content aggregators, and new Internet video services to gain a foothold in Japan. The author urges serious study the policymakers on the reform of broadcasting framework that can provide the flexibility necessary for the further development and growth of the TV economy in Japan.

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